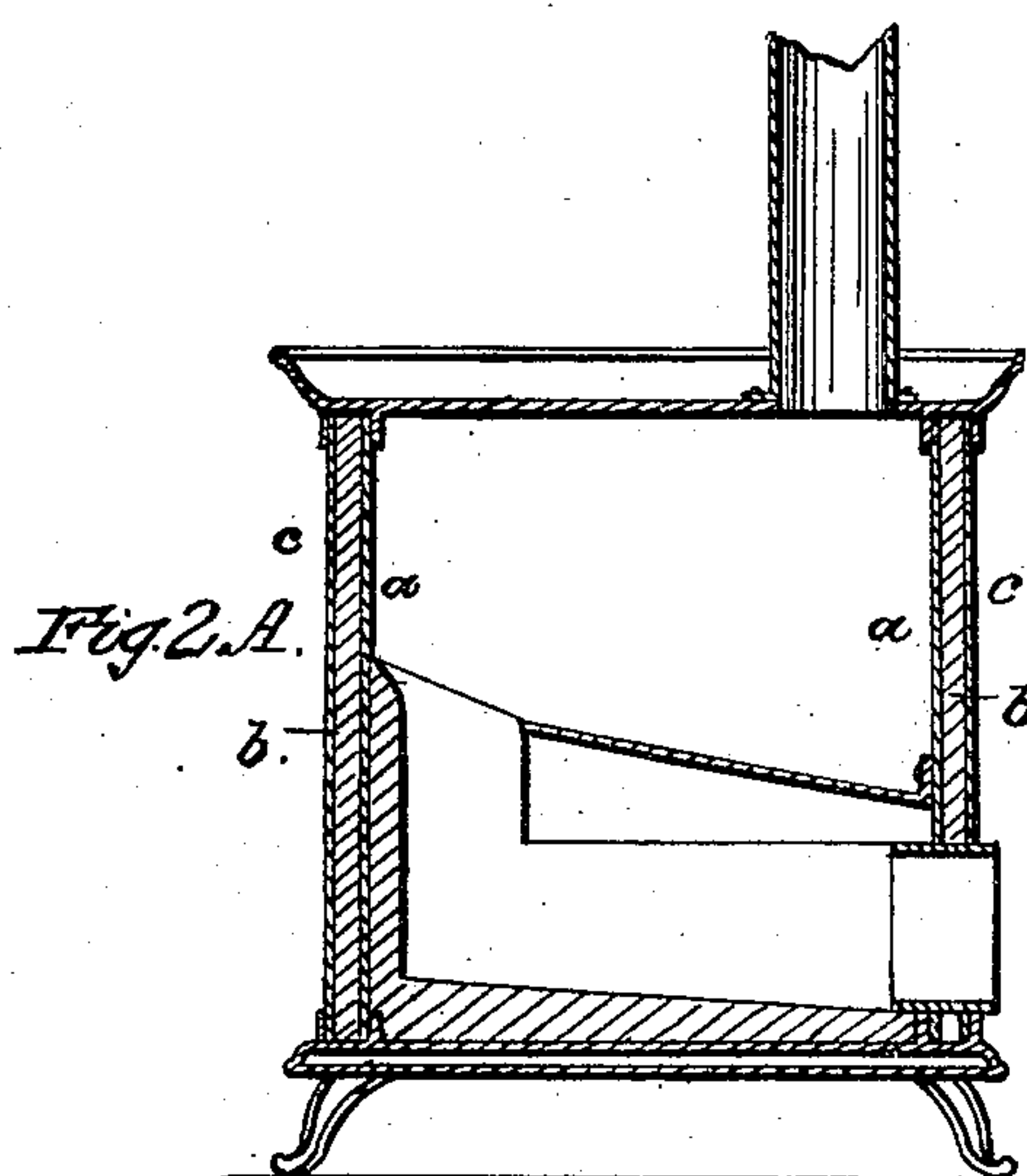
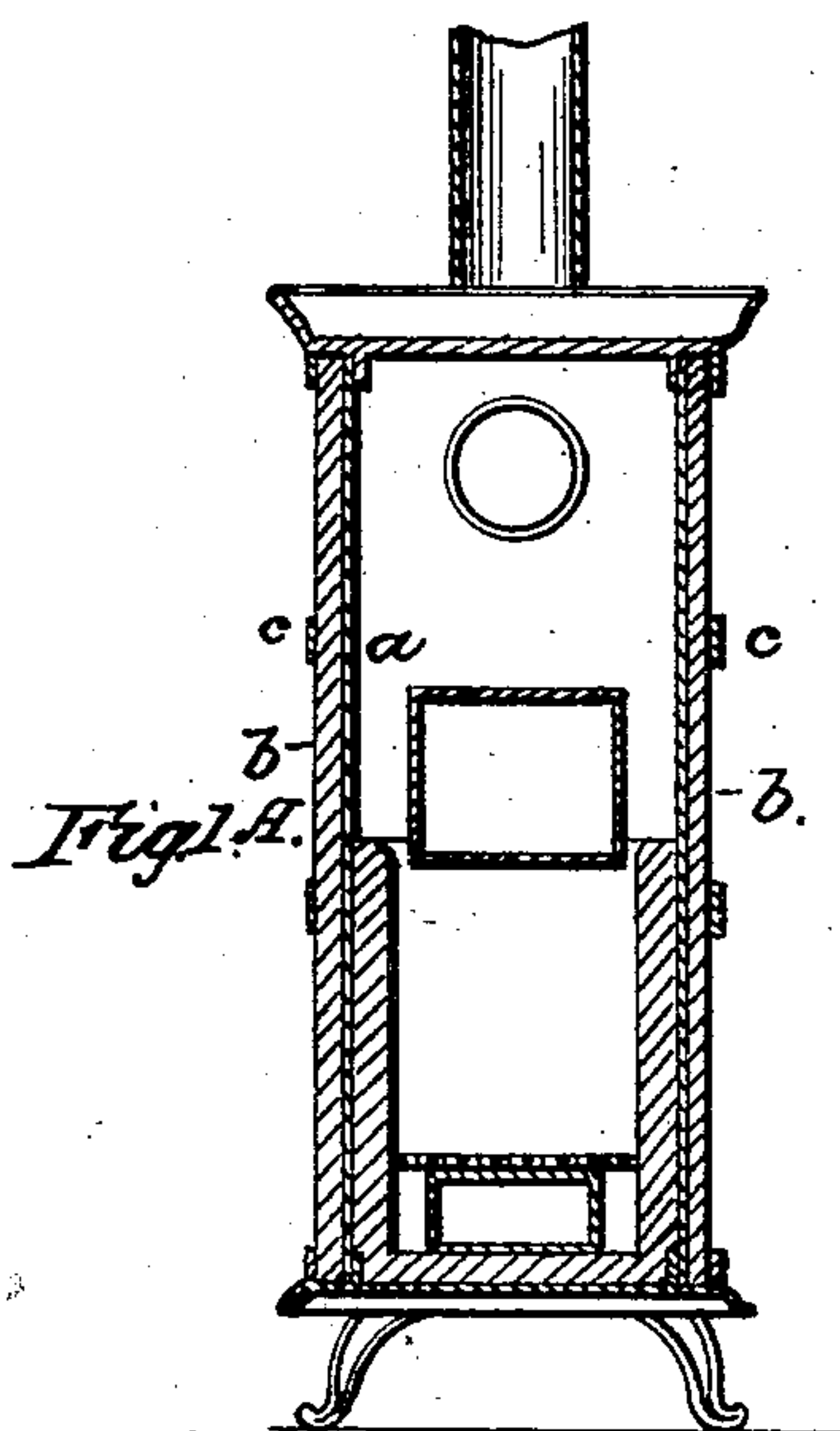
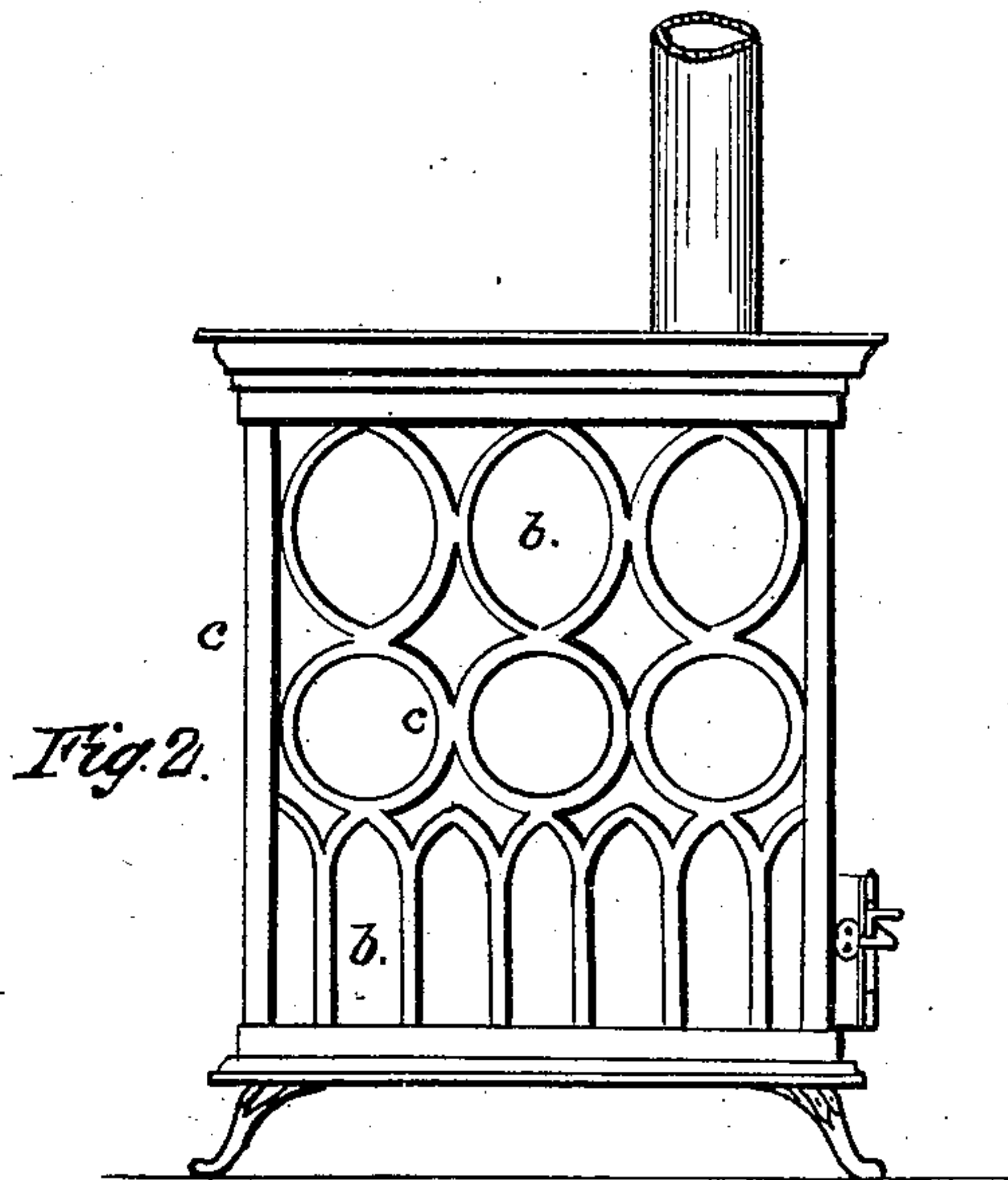
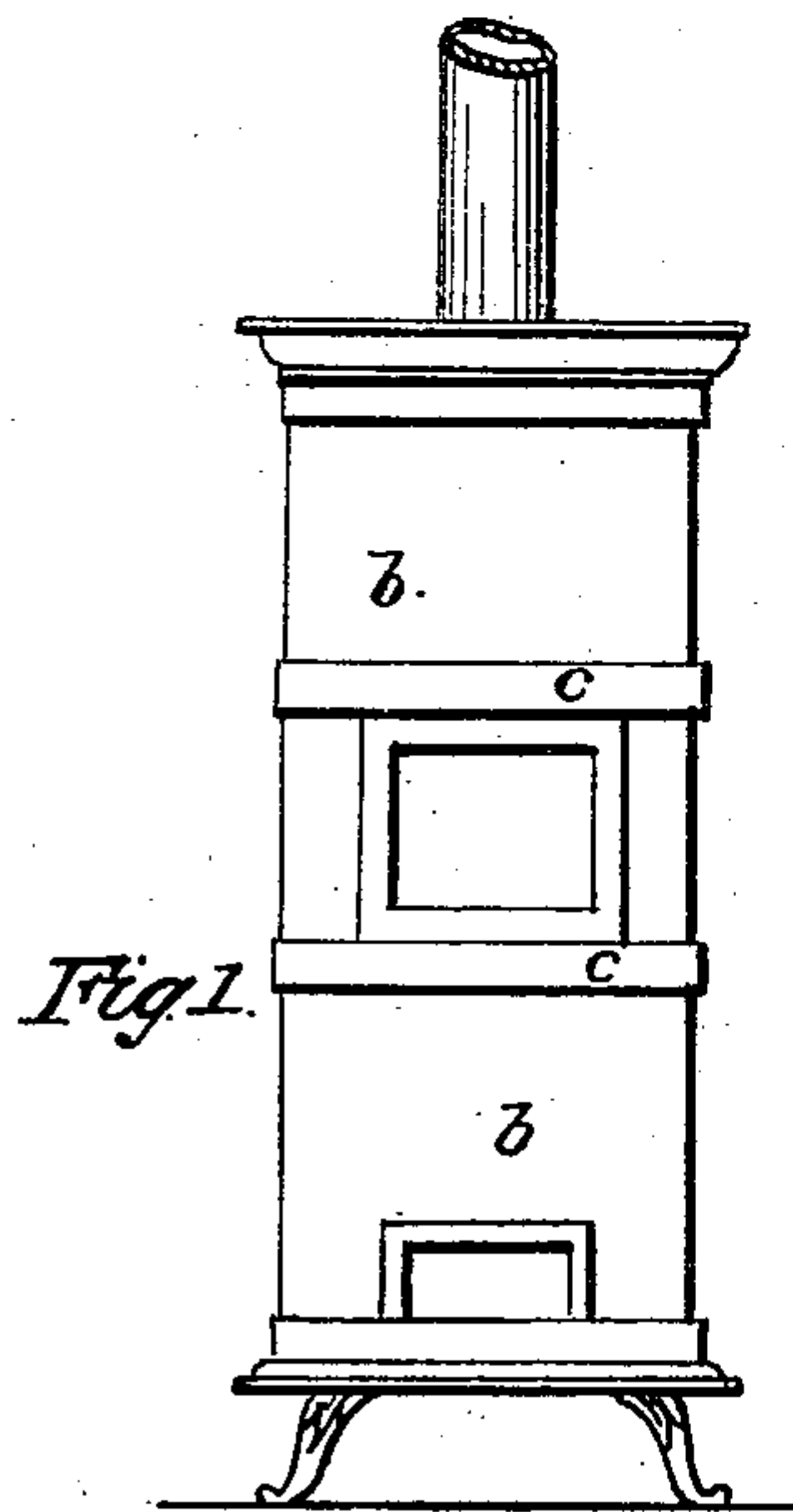


OERTLY & FENDRICH.

Stove.

No. 81,197.

Patented Aug. 18, 1868.



Witnesses:

Jno. D. Patton
R. H. Hutton

Inventors.

B. Oertly & H. Fendrich
By their atty A. B. Stroughton

UNITED STATES PATENT OFFICE.

B. OERTLY AND XAVIER FENDRICH, OF WASHINGTON, D. C.

IMPROVEMENT IN COAL-STOVES.

Specification forming part of Letters Patent No. **81,197**, dated August 18, 1868.

To all whom it may concern:

Be it known that we, B. OERTLY and XAVIER FENDRICH, of Washington city, in the District of Columbia, have invented certain new and useful Improvements in Stoves of Iron Coated with Artificial Stone; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents an elevation of a cylinder or coal stove made after our general plan, and Fig. 1^A represents a vertical section through the same. Fig. 2 represents an elevation of a box or wood stove made according to our general plan, and Fig. 2^A represents a vertical section through the same.

It is well known that porcelain stoves have withstood the test of ages, and that, where they are used, no modern stoves have supplanted their use; that the heat given out by them is more uniform, and far more pleasant and healthful than that of any iron stoves; but they are expensive and immovable fixtures in a house, and, moreover, require very skillful persons to set them up; and for these reasons have not gone into general use, except where they originated and are best known, and where portable stoves are not demanded.

The object and purpose of our invention is to make a stove having all the beneficial properties of porcelain stoves, with the economy and portability of the modern stoves of the day; and our invention consists in the construction of a fire-proof stove, made of an iron or other metal frame-work coated by or embedded in a mass of artificial stone.

To enable others skilled in the art to make and use our invention, we will proceed to describe the same with reference to the drawings.

The frame *a* of the stove may be of any desired shape, form, and size, and of cast, wrought, sheet, or boiler iron, perforated, in skeleton, or otherwise; or it may be made of woven wire, or interlaced rods or strips, according to the strength which the stove, in its

varied uses, shall require. This frame-work of metal is coated on the inside and outside, or on the outside only, by a composition or plastic mass of soluble glass and clay, chalk, marble-dust, or other mineral fire-proof substance, *b*, which is pressed on to or tamped around the frame *a* by means of proper forms.

The composition or coating may be colored to any tint, or ornamented in moldings or figures pressed into or upon the plastic mass, which mass may be laid on in one, two, or more coatings, and becomes hard, tenacious, and entirely fire-proof, and, when of cylindrical form, may be of one piece, and easily removed or replaced, being but little heavier than cylinder-stoves of iron.

If found desirable, bands *c*, of metal, plain or ornamental, may be put around the stove to give it greater strength or greater ornament; or, instead of bands, as in Fig. 1, light, open, ornamental frame-work of metal may be used, as Fig. 2, and when made in box or rectangular form, the sides, ends, top, and bottom may be in separate pieces, and fitted and held together in the ordinary way; or the top and bottom plates may be of iron alone, if so preferred.

The stoves are furnished with the usual openings for feeding in fuel, draft, or escape for gases, supports, &c.

The stove-pipe may be coated also with the composition, and the usual lining of fire-clay or metal may be used.

Having thus fully described our invention, what we claim therein as new, and desire to secure by Letters Patent, is—

A stove made in whole or in part of an iron or other metal frame-work, coated or embedded in a composition or mass of soluble glass and mineral matter that will be fire-proof, substantially as and for the purpose set forth.

B. OERTLY.
X. FENDRICH.

Witnesses:

A. B. STOUGHTON,
EDM. F. BROWN.